

Course: “Research Methods in Education” (8604)

Semester: Spring, 2021

ASSIGNMENT No. 2

Q. 1 What do you mean by research tool? Discuss different research tools. What is meant by the validity and reliability of research tools?

The term **observational research** is used to refer to several different types of non-experimental studies in which behavior is systematically observed and recorded. The goal of observational research is to describe a variable or set of variables. More generally, the goal is to obtain a snapshot of specific characteristics of an individual, group, or setting. As described previously, observational research is non-experimental because nothing is manipulated or controlled, and as such we cannot arrive at causal conclusions using this approach. The data that are collected in observational research studies are often qualitative in nature but they may also be quantitative or both (mixed-methods). There are several different types of observational research designs that will be described below.

NATURALISTIC OBSERVATION

Naturalistic observation is an observational method that involves observing people’s behavior in the environment in which it typically occurs. Thus naturalistic observation is a type of field research (as opposed to a type of laboratory research). Jane Goodall’s famous research on chimpanzees is a classic example of naturalistic observation. Dr. Goodall spent three decades observing chimpanzees in their natural environment in East Africa. She examined such things as chimpanzee’s social structure, mating patterns, gender roles, family structure, and care of offspring by observing them in the wild. However, naturalistic observation could more simply involve observing shoppers in a grocery store, children on a school playground, or psychiatric inpatients in their wards. Researchers engaged in naturalistic observation usually make their observations as unobtrusively as possible so that participants are not aware that they are being studied. Such an approach is called **disguised naturalistic observation**. Ethically, this method is considered to be acceptable if the participants remain anonymous and the behavior occurs in a public setting where people would not normally have an expectation of privacy. Grocery shoppers putting items into their shopping carts, for example, are engaged in public behavior that is easily observable by store employees and other shoppers. For this reason, most researchers would consider it ethically acceptable to observe them for a study. On the other hand, one of the arguments against the ethicality of the naturalistic observation of “bathroom behavior” discussed earlier in the book is that people have a reasonable expectation of privacy even in a public restroom and that this expectation was violated.

In cases where it is not ethical or practical to conduct disguised naturalistic observation, researchers can conduct **undisguised naturalistic observation** where the participants are made aware of the researcher presence and monitoring of their behavior. However, one concern with undisguised naturalistic observation is reactivity. **Reactivity** refers to when a measure changes participants’ behavior. In the case of undisguised naturalistic observation, the concern with reactivity is that when people know they are being observed and studied, they may act differently than they normally would. For instance, you may act much differently in a bar

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if you know that someone is observing you and recording your behaviors and this would invalidate the study. So disguised observation is less reactive and therefore can have higher validity because people are not aware that their behaviors are being observed and recorded. However, we now know that people often become used to being observed and with time they begin to behave naturally in the researcher’s presence. In other words, over time people habituate to being observed. Think about reality shows like Big Brother or Survivor where people are constantly being observed and recorded. While they may be on their best behavior at first, in a fairly short amount of time they are, flirting, having sex, wearing next to nothing, screaming at each other, and at times acting like complete fools in front of the entire nation.

PARTICIPANT OBSERVATION

Another approach to data collection in observational research is participant observation. In **participant observation**, researchers become active participants in the group or situation they are studying. Participant observation is very similar to naturalistic observation in that it involves observing people’s behavior in the environment in which it typically occurs. As with naturalistic observation, the data that is collected can include interviews (usually unstructured), notes based on their observations and interactions, documents, photographs, and other artifacts. The only difference between naturalistic observation and participant observation is that researchers engaged in participant observation become active members of the group or situations they are studying. The basic rationale for participant observation is that there may be important information that is only accessible to, or can be interpreted only by, someone who is an active participant in the group or situation. Like naturalistic observation, participant observation can be either disguised or undisguised. In **disguised participant observation**, the researchers pretend to be members of the social group they are observing and conceal their true identity as researchers. In contrast with **undisguised participant observation**, the researchers become a part of the group they are studying and they disclose their true identity as researchers to the group under investigation. Once again there are important ethical issues to consider with disguised participant observation. First no informed consent can be obtained and second passive deception is being used. The researcher is passively deceiving the participants by intentionally withholding information about their motivations for being a part of the social group they are studying. But sometimes disguised participation is the only way to access a protective group (like a cult). Further, disguised participant observation is less prone to reactivity than undisguised participant observation.

Rosenhan’s study (1973)^[1] of the experience of people in a psychiatric ward would be considered disguised participant observation because Rosenhan and his pseudopatients were admitted into psychiatric hospitals on the pretense of being patients so that they could observe the way that psychiatric patients are treated by staff. The staff and other patients were unaware of their true identities as researchers.

Another example of participant observation comes from a study by sociologist Amy Wilkins (published in *Social Psychology Quarterly*) on a university-based religious organization that emphasized how happy its members were (Wilkins, 2008)^[2]. Wilkins spent 12 months attending and participating in the group’s meetings

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and social events, and she interviewed several group members. In her study, Wilkins identified several ways in which the group “enforced” happiness—for example, by continually talking about happiness, discouraging the expression of negative emotions, and using happiness as a way to distinguish themselves from other groups.

One of the primary benefits of participant observation is that the researcher is in a much better position to understand the viewpoint and experiences of the people they are studying when they are apart of the social group. The primary limitation with this approach is that the mere presence of the observer could affect the behavior of the people being observed. While this is also a concern with naturalistic observation when researchers because active members of the social group they are studying, additional concerns arise that they may change the social dynamics and/or influence the behavior of the people they are studying. Similarly, if the researcher acts as a participant observer there can be concerns with biases resulting from developing relationships with the participants. Concretely, the researcher may become less objective resulting in more experimenter bias.

STRUCTURED OBSERVATION

Another observational method is structured observation. Here the investigator makes careful observations of one or more specific behaviors in a particular setting that is more structured than the settings used in naturalistic and participant observation. Often the setting in which the observations are made is not the natural setting, rather the researcher may observe people in the laboratory environment. Alternatively, the researcher may observe people in a natural setting (like a classroom setting) that they have structured some way, for instance by introducing some specific task participants are to engage in or by introducing a specific social situation or manipulation. Structured observation is very similar to naturalistic observation and participant observation in that in all cases researchers are observing naturally occurring behavior, however, the emphasis in structured observation is on gathering quantitative rather than qualitative data. Researchers using this approach are interested in a limited set of behaviors. This allows them to quantify the behaviors they are observing. In other words, structured observation is less global than naturalistic and participant observation because the researcher engaged in structured observations is interested in a small number of specific behaviors. Therefore, rather than recording everything that happens, the researcher only focuses on very specific behaviors of interest.

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Researchers Robert Levine and Ara Norenzayan used structured observation to study differences in the “pace of life” across countries (Levine & Norenzayan, 1999)^[3]. One of their measures involved observing pedestrians in

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a large city to see how long it took them to walk 60 feet. They found that people in some countries walked reliably faster than people in other countries. For example, people in Canada and Sweden covered 60 feet in just under 13 seconds on average, while people in Brazil and Romania took close to 17 seconds. When structured observation takes place in the complex and even chaotic “real world,” the questions of when, where, and under what conditions the observations will be made, and who exactly will be observed are important to consider. Levine and Norenzayan described their sampling process as follows:

“Male and female walking speed over a distance of 60 feet was measured in at least two locations in main downtown areas in each city. Measurements were taken during main business hours on clear summer days. All locations were flat, unobstructed, had broad sidewalks, and were sufficiently uncrowded to allow pedestrians to move at potentially maximum speeds. To control for the effects of socializing, only pedestrians walking alone were used. Children, individuals with obvious physical handicaps, and window-shoppers were not timed. Thirty-five men and 35 women were timed in most cities.” (p. 186). Precise specification of the sampling process in this way makes data collection manageable for the observers, and it also provides some control over important extraneous variables. For example, by making their observations on clear summer days in all countries, Levine and Norenzayan controlled for effects of the weather on people’s walking speeds. In Levine and Norenzayan’s study, measurement was relatively straightforward. They simply measured out a 60-foot distance along a city sidewalk and then used a stopwatch to time participants as they walked over that distance.

As another example, researchers Robert Kraut and Robert Johnston wanted to study bowlers’ reactions to their shots, both when they were facing the pins and then when they turned toward their companions (Kraut & Johnston, 1979)^[4]. But what “reactions” should they observe? Based on previous research and their own pilot testing, Kraut and Johnston created a list of reactions that included “closed smile,” “open smile,” “laugh,” “neutral face,” “look down,” “look away,” and “face cover” (covering one’s face with one’s hands). The observers committed this list to memory and then practiced by coding the reactions of bowlers who had been videotaped. During the actual study, the observers spoke into an audio recorder, describing the reactions they observed. Among the most interesting results of this study was that bowlers rarely smiled while they still faced the pins. They were much more likely to smile after they turned toward their companions, suggesting that smiling is not purely an expression of happiness but also a form of social communication.

When the observations require a judgment on the part of the observers—as in Kraut and Johnston’s study—this process is often described as **coding**. Coding generally requires clearly defining a set of target behaviors. The observers then categorize participants individually in terms of which behavior they have engaged in and the number of times they engaged in each behavior. The observers might even record the duration of each behavior. The target behaviors must be defined in such a way that different observers code them in the same way. This difficulty with coding is the issue of interrater reliability, as mentioned in Chapter 4. Researchers are expected to demonstrate the interrater reliability of their coding procedure by having multiple raters code the same behaviors independently and then showing that the different observers are in close agreement. Kraut and

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Johnston, for example, video recorded a subset of their participants’ reactions and had two observers independently code them. The two observers showed that they agreed on the reactions that were exhibited 97% of the time, indicating good interrater reliability.

One of the primary benefits of structured observation is that it is far more efficient than naturalistic and participant observation. Since the researchers are focused on specific behaviors this reduces time and expense. Also, often times the environment is structured to encourage the behaviors of interested which again means that researchers do not have to invest as much time in waiting for the behaviors of interest to naturally occur. Finally, researchers using this approach can clearly exert greater control over the environment. However, when researchers exert more control over the environment it may make the environment less natural which decreases external validity. It is less clear for instance whether structured observations made in a laboratory environment will generalize to a real world environment. Furthermore, since researchers engaged in structured observation are often not disguised there may be more concerns with reactivity.

Q.2 Suppose you have to conduct research on topic i.e. problems of the head mistresses in higher secondary school in Lahore division. Develop a research proposal on this topic.

1 Introduction

Education plays a role in the development of the country. It is a process of learning which aimed to raises people's creativity morally, social, and culturally. Education is very important and basic right of every human being. Only an educated person has the ability to take right decisions at the right time. No one country can achieve its targets/ goals without educated force. Education is essential component of the development and growth of any country. Without education no any nation has any idea about the utilization of the sources in better way. Education is considered as main pillars of a society and the students are its main stakeholders (Kopnina, 2012).

Self-concept and self-efficacy are the most widely-used and theoretically important representations of positive self-beliefs. In this article, focused on the murky distinction between these two constructs and provide a construct-validation framework to test for this fallacy that has wide applicability to psychological measurement, theory and practice. On the basis of the nature and construction of items used to infer the constructs we posit an a priori classification of diverse self-belief constructs as either self-concept-like or self-efficacy-like constructs. We empirically test this theoretical classification on the basis of relations among factors using the logic of multitrait or multimethod analysis, classic frame-of-reference effects (social and dimensional comparison effects) that influence self-concept formation but are posited to be attenuated for self-efficacy responses, and long-term predictions of critical outcomes (grades, test scores, aspirations) from four waves of self-belief measures after controlling for pre-existing differences (Mills, 2003).

Student assessment is the pivotal piece around which school improvement take place. Today passing an examination is prioritized to acquiring knowledge. It is widely felt that unless major efforts are made to overhaul the existing system of examinations, it will not be possible to carry out any major reform or qualitative

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improvement. Student assessment is the pivotal piece around which school improvement take place. Assessment of student learning is undergoing profound change (Routledge et al., 2019).

Other psychological constructs have also been developed to assess self-beliefs that add even more complexity to the murky distinction between self-concept and self-efficacy. Of particular relevance to the present investigation, the construct of outcome expectancy has been important since early theoretical work and, subsequently, Atkinson's model of achievement motivation. Modern versions of expectancy-value theory have greatly expanded on this historical theoretical framework, incorporating a wide variety of psychosocial and sociocultural variables. Indeed, self-efficacy theory proposes that self-efficacy perceptions are independent of outcome expectancy (O'Day & Smith, 1993).

For the parents and students, improving the quality of education invariably means raising the levels of academic performance usually measured in the test scores in various subjects of school curriculum. Good assessment system must rest on strong educational foundations. These foundations include organizing schools to meet the learning needs of all their students, understanding how students learn, establishing high standards for student learning, and providing equitable and adequate opportunity to learn. Assessment systems report on and certify student learning and provide information for school improvement and accountability (Hammond, 1994).

Information for accountability and improvement comes from regular, continuing work and assessment of students in schools and from large-scale assessments. Assessment systems are regularly reviewed and improved to ensure to be beneficial to all students. Assessment is important because it is widely believed that what gets assessed is what gets taught, and that the format of assessment influences the format of learning and teaching. Interest in performance assessment has also been justified on the basis that using such measures will promote educational equity (Mills, 2003).

Various assessment strategies can be implemented together at the different levels to provide for the different information needs in a coordinated, coherent manner. Nations that want better outcomes for students are instructed to look at the strategies employed by the higher-performing nations to improve instruction. Assessments are primarily used as an exit criterion to certify previous learning. Thus the primary purpose of high school assessments will be to determine if students have the skills and knowledge to succeed in college and postsecondary programs (Rind et al., 2019).

There is no denying the fact that the present day examination system has become merely an awarding mechanism without any regard to students' abilities. It is widely felt that unless major efforts are made to overhaul the existing system of examinations, it will not be possible to carry out any major reform or qualitative improvement. The main drawback of the present system is that there is no flexibility, there are very limited options, and a set pattern is imposed from the top. This is a strong reason behind the low percentage of student transition to higher levels of education in India. The Central Board of Secondary Education (CBSE) has taken appropriate steps by introducing the system of Grades instead of marks. As is done in several other countries,

the students will be assessed on the basis of a scientific evaluation and ranked on one among the five Grades ranging from ‘outstanding’ to ‘poor’ (Gibton, 2015).

2 Review of Related Literature

2.1 Critical Study of Secondary Education Situation

Free and quality secondary education is the basic right of every citizen as cited in the constitution of Islamic Republic of Pakistan. To ensure free and equal quality education for all, secondary education level should be considered more important. But here in Pakistan, situation is totally different because of old traditional education system there is no specific measures for any level of education. So, in terms of literacy rate outcomes in the region the country stands in the lowest rank. Pakistan shows less than 50% literacy rate (Krathwohl, 2002).

Out of this male literacy rate is 68% and female only 57% which is the lowest among other countries in the region like Sri Lanka and India. AJ&K government is a small territorial unit under overall administrative setup of Pakistan. The state depends on Pakistan for its outlet to the rest of the world. The aim of the paper is to analyze the progress on Millennium Development Goal-2 in order to find the factors delaying progress and suggest policy measures for improvement especially at secondary level. In 1947 there is committed with the target of free and compulsory secondary education within the decade. In 1952 National Commission on Education Formation was formed which resulted in an education policy (Qi, 2004).

The education policy introduced in 1959 which is focused on character building through curriculum reform, revision of curricula and secondary educational for all within 15 years. The country continued to see a shift in the education policies in the years to come. 1972 saw a dramatic shift in policy with the emphasis on nationalization. Noted that in 1972, more than 3,000 schools were nationalized during Bhutto’s regime which resulted in declined quality of education due to resource scarcity and management issues. After the nationalization died its own death due to huge increase in government expenditures, the policy makers finally came up with the first National Education Policy in 1979 which was revised in 1992. However both policies failed to achieve their desired outcomes (Gibton, 2015).

2.2 National Education Policy (NEP)

National Education Policy is standardized document issued by the Ministry of Education (MoE) Pakistan. AJ&K is administered by Pakistan so AJ&K also follow the Pakistan Education Policy which needs to be reform. NEP 2009 document is the review of the previous education policies with recommended reforms and policy actions at sub-sector level of education. The new policy was introduced due to the failure and inability to achieve the desired outcomes. During this overall period the policies have not been implemented properly. So, this poor policy implementation cause many problems such as political manipulations, corruption, systemic issues and poor management and supervision (Irvine, 2017).

Another reason is political instability and poor economy of the country. In the poor implementation of education policies the role of poor governmental successive policies cannot be ruled out. Every successive government

comes up with new policy on the expulsion of the policies of the previous government. Thus the repercussions of the successive governmental policies have marred the structure of the education system since 1947 (Krathwohl, 2002).

In AJ&K state there is no special administrative setup to analyze the problems for secondary education. In order to realization of important task for universal secondary education there is no proper administrative setup in education department to co-ordinate the activities with regard to MDGs, create awareness and arrange periodic assessment of progress on goals and to make policy adjustments according to the feedback from the field. NCHD (National Commission for Human Development) is only the government program who is working on this task in support of education department on enrollment enhancement, dropout control, and quality education of secondary level but now they are working separately on their own CBFS (Community Based Feeder Schools) but also contribute for MDGs (Gibton, 2015).

2.3 Role of Teachers

The teacher quality in AJ&K is very poor which is the main reason for low level of educational qualifications required to become a secondary school teacher that includes ten years of schooling and an eleven-month certificate program. It has been identified that student’s achievement is closely related to the number of years of formal schooling of teachers. Thus, teachers with 12 years of education perform better than students of matriculate (10 years education) teachers, who in turn perform better than students of teachers with only grade eight qualifications (Mills, 2003).

The second factor involve to the quality of teacher certification programs, little emphasis on teaching practice and non-existence of a proper support/monitoring system for teachers, which suffers from the lack of adequately trained master trainers,. In the absence of any accredited body to certify teachers, the mere acquisition of a certificate/diploma is considered sufficient to apply for a teaching position (Aftab et al., 2014).

Furthermore, teacher appointment is the issue of local interest groups who seeking to place teachers of their choice within their constituency. This system leads to the teacher absenteeism emphasized by the absence of an effective supervision system. The appointment of teachers especially in secondary schools is subject to the political influence or paying huge money (Rehmani, 2003).

3 Statement of the Problem

The study under investigation specially designed to evaluate the headmistress problems in evaluation at secondary level and the problems faced by secondary school students and teachers.

4 Objectives of the study

The study's objective will be:

1. To explore the headmistress problems in evaluation at secondary level of education in District Lahore.
2. To analyze prevailing system of education that teachers use to take examinations of students at secondary level in District Lahore.

5 Research Questions

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The following research questions guides the study:

1. How to evaluate the headmistress problems of examination at secondary level in District Lahore.
2. Which methods of taking examination effect the student's learning at secondary level in District Lahore?

6 Delimitation of the study

This study was limited to district Lahore and Secondary Level teachers and students.

7 Significance of the study

A major concern of the schools is to increase the student's evaluation process. One way to do this to focus on the environment of the student's evaluation and the teacher's evaluating method that will influence the student's achievement and performance to create best evaluating environment to facilitate student's evaluation process. Its significance is for the secondary level students to provide concrete and reasonable evaluation methods in the examination. There is no denying the fact that the present day examination system has become merely an awarding mechanism without any regard to students' abilities. It is widely felt that unless major efforts are made to overhaul the existing system of examinations, it will not be possible to carry out any major reform or qualitative improvement. The main drawback of the present system is that there is no flexibility, there are very limited options, and a set pattern is imposed from the top.

8 Research Methodology

Random sampling has been utilized to draw the sample from the finite universe of the secondary Schools. The primary data is collected through self-designed questionnaire from the selected secondary schools. The data is analyzed through mean and standard deviation with the help of SPSS version to establish the goodness of fit, consistency of association and the pattern of responses.

8.1 Population of the Study

Thirty (30) Government Secondary School present in district Lahore. Five hundred ten (510) teachers and students of secondary level present in thirty (30) Government school. Four hundred thirty (430) secondary students and eighty (80) teachers selected for population of this study.

8.2 Sample of the study

Random sampling technique will be used for the evaluation of sample. Therefore sample of the study will be consisted of secondary level teachers and students. Hundred (100) secondary level students and twenty (20) teachers were selected as a sample.

8.3 Instrument of the study

A questionnaire will be used as a research instrument to collect data from teachers and students. The questionnaire will be consisted of 15 items with five-point likert scale.

8.3.1 Validity of the instrument

After the development of questionnaire it will be validated from educational experts of department of Education University of Lahore AJ&K.

8.3.2 Pilot Testing

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The researcher will distributed the questionnaire among the 20 teachers and 100 students of secondary level. The researcher will incorporate all the parts raised by the participation of the pilot testing.

8.3.3 Reliability of the instrument

The reliability of the instrument checked by the cronbach's Alpha statistical technique.

8.4 Data collection

The data will be collected through the questionnaire.

8.5 Data analysis

The data collected through the questionnaire will tabulated, analyzed and interpreted. The percentage, mean, standard deviation and differences of means were computed for each variable. Significance of difference between the mean opinions of both teachers and students.

9 References

- Aftab, H., & Minhas, R. S. M. (2014). Still Image based foreign object debris (FOD) detection system. *Journal of Science Technology and Development, Pakistan*, 33(1), 30-33.
- Cranor, L. F., & Garfinkel, S. (2005). *Security and usability: designing secure systems that people can use.* " O'Reilly Media, Inc."
- Darling-Hammond, L. (1994). *Professional development schools: Schools for developing a profession.* Teachers College Press, 1234 Amsterdam Ave., New York, NY 10027.
- Gibton, D. (2015). *Researching education policy, public policy, and policymakers: Qualitative methods and ethical issues.*
- Irvine, J. (2017). A Comparison of Revised Bloom and Marzano's New Taxonomy of Learning. *Research in Higher Education Journal*, 33.
- Joshi, K. D. & Holsapple, C. W. (2001). *Organizational knowledge resources. Decision support systems*, 31(1), 39-54.
- Kopnina, H. (2012). Education for sustainable development (ESD): the turn away from ‘environment ‘in environmental education?. *Environmental Education Research*, 18(5), 699-717.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into practice*, 41(4), 212-218.
- Koh, K. H. (2011). Improving teachers’ assessment literacy through professional development. *Teaching Education*, 22(3), 255-276.
- Lingard, B., Hayes, D., & Mills, M. (2003). *Leading learning: Making hope practical in schools: Making hope practical in schools.* McGraw-Hill Education (UK).
- Mills, S. (2003). *Gender and politeness (No. 17).* Cambridge University Press.
- O’Day, J. A., & Smith, M. S. (1993). *Systemic reform and educational opportunity. Designing coherent education policy: Improving the system*, 250-312.
- Qi, L., Xu, Z., Jiang, X., Hu, C., & Zou, X. (2004). *Preparation and antibacterial*

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activity of chitosan nanoparticles. *Carbohydrate research*, 339(16), 2693-2700.

Rehmani, A. (2003). Impact of public examination system on teaching and learning in Pakistan. *International Biannual Newsletter ANTRIEP*, 8(2), 3-7.

Rind, I. A., Mari, M. A., & Heidari-Shahreza, M. A. (2019). Analysing the impact of external examination on teaching and learning of English at the secondary level education. *Cogent Education*, 6(1), 1574947.

Routledge, I. A., & Malik, A. (2019). The examination trends at the secondary and higher secondary level in Pakistan. *Social Sciences & Humanities Open*, 1(1), 100002.

Q.3 Develop a research proposal on “Analysis of Reforms in Curriculum for Secondary Level in Pakistan” mention all necessary steps properly.

1. Introduction

Education is a way of imparting knowledge, skills and learning. It helps us to learn new things and develop a sense of innovation and creativity. Education is a tool which helps us to achieve success and earn respect in the society. Education is a foundation for the development and progress of any society. It is a base upon which the whole building of human development stands. Getting proper education is necessary for success in life just like the food is necessary for the healthy human body. The good education is constructive in nature which is very helpful in future life (Bouws & Bulhuis, 2017).

Education is a gradual process which brings positive changes in human life and behavior. Education brings a natural and lasting change in an individual’s reasoning and ability to achieve the targeted goal. It facilitates us to investigate our own considerations and thoughts and makes it ready to express it in various shapes. Education is the main thing that encourages us to distinguish between right and wrong because in the absence of education, we can’t do what we need or we can’t achieve our goal. Curriculum reform (RE) helps pupils develop an understanding of themselves and others. Curriculum reform promotes the spiritual, moral, social and cultural development of individuals and of groups and communities (Desmet & Pohlmeier, 2013).

The curriculum reform is basically divided into two main streams. One stream comprises Dini Madrasahs which are controlled by independent Madrasa Boards that have been established by various religious schools of thought in the country. The other stream pertains to colleges, universities and other institutions that are patterned along the modern western educational system. This stream can be further subdivided into two types: public institutions and private institutions. In spite of many commonalities, the curricula, institutional setups, objectives, and outcomes of these three types of institutions are quite different, apparently irreconcilably, from each other (Zhou et al., 2013).

Religious Madrassahs emerged as centers of organized learning in early Islamic history during ninth and tenth centuries Arabia. These Madrassahs were a new innovation because there was no tradition of organized learning in Arab before the emergence of these institutions. They were designed to satisfy the need for organized teaching of newly emerging fields of knowledge like Hadith, Tafsir, Kalaam and logic. Owing to their

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attraction of the best minds of their time, very soon they surpassed all forms of private learning. The rigid classification of knowledge based on religious law and dogma inevitably made jurists and traditionalists final authorities in religious and worldly matters (Fadul, 2011).

Teachers play an essential role in education, most especially in the lives of the students they teach in the classroom. What defines a teacher is his/her ability to teach students and a positive influence on them. Generally, the role of a teacher in education goes beyond teaching. As a curriculum reform or religious and moral education teacher, you’d help your pupils recognize and understand religious diversity and non-religious beliefs and the importance of these in society. You’d inspire and motivate them to explore different values and attitudes and consider moral and ethical issues to help them reflect on their own approach to making moral decisions (Fadul, 2011).

You’d encourage the students to take pride in their achievements inside and outside school. You’d support them to build good relationships with other students and teachers and play a positive part in the life of the school and the local community. You’d help them get the knowledge, skills and attributes they’ll need for a successful and positive life when they leave school (Gauthier, 2016).

For the development of a country, great nations has to be paid special attention to education and learning as well as good morals, and it is impossible without the contribution of a humble teachers. Good teacher is one who observes his purpose in teaching as existence one of deliverance rather than regulatory students (Gauthier, 2016).

2. Review of literature

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion and directed research. Education frequently takes place under the guidance of educators, however learners can also educate themselves. Education can take place in formal or informal settings and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The methodology of teaching is called pedagogy.

Formal education is commonly divided formally into such stages as

1. preschool or kindergarten,
2. primary school,
3. secondary school
4. college
5. University, or apprenticeship.

A right to education has been recognized by some governments and the United Nations. In most regions, education is compulsory up to a certain age. There is a movement for education reform, and in particular for evidence-based education with global initiatives aimed at achieving the Sustainable Development Goal, which promotes quality education for all.

3 Statement of the problem

Curriculum reform and ethics make a man human being. There are many ways to learn curriculum reform. It can be observed that we are moving away from curriculum. Especially youth is moving away from curriculum and forgetting curriculum reform and ethics.

Students are becoming modern day by day and forgetting curriculum reform. So this study will be conducted to identify the role of secondary teachers in developing curriculum reform among students at secondary level. Therefore the focus of the study on the role of teacher in promoting curriculum reform among students at secondary level.

4 Objectives of the Study

The study will have following objectives:

1. To explore the role of teacher in promoting curriculum reform among students at secondary level.
2. To measure the curriculum reform among students at secondary level.

5 Research Questions

Following will be the research questions of the study:

1. What is the role of teacher in promoting curriculum reform among students at secondary level?
2. How curriculum reform are promoting in secondary level student?

6 Delimitation of the Study

The study will be delimited to all Government Boys secondary schools of Province Punjab Pakistan and all the schools are in urban area.

7 Significance of the Study

The study will be significant for the teachers that they deliver curriculum reform to students an effective way. The study will be significant for students as they will come to know the importance of Islam and curriculum reform. It will be significant for society as it will help in producing good and mannered citizens according to Islam.

Curriculum reform is important for the development of understanding and knowledge about religions in the young minds. It provides an individual with insight into different religious practices, faiths, beliefs and helps people know and familiarize with different cultures around the world. It builds tolerance among people with different background and religious beliefs. Overall, it serves to build a better society, community, and culture of the human being.

8 Research Methodology

The study will be descriptive in nature and survey method will be conducted to collect data from the respondents about the role of teacher in promoting curriculum reform.

8.1 Population of the Study

All the government teachers of secondary schools of province Punjab were population of the study. There are 200 teachers working in secondary schools in province Punjab.

8.2 Sample of the Study

Simple random sampling technique will be used for the selection of sample. The researcher will select 50 teachers by using simple random sampling technique.

8.3 Research Instrument

The questionnaire will be used as an instrument to collect data from the teachers. The questionnaire will be based on 20 to 30 items which will be based on performance of indicators of teachers. Five point likert scale will be used for obtaining the response.

8.3.1 Validity of Instrument

After the development of questionnaire, it will be validated from two educational exports of the Department of Education.

8.3.2 Pilot Testing

The researcher will distribute questionnaire among 20 teachers. The teachers will be the not prefer the final survey. The researcher will incorporate all the points raised by the participants of pilot testing.

8.3.3 Reliability of Instrument

Cronbach's alpha to check the internal consistency of the items the statistical technique will be used.

8.4 Data Collection

The researcher personally visited the sampled school and collected the data.

8.5 Data Analysis

Statistical package for social sciences (SPSS) software version 20 will be used for the analysis of data. The researcher will be use mean standard frequency and percentage to analysis the data.

9 References

- Bouws, M., & Bulthuis, K. (2017). Exploring Turnover during Intra-Organizational Merger at One Medical Institution. Jill Sharp, Spring Arbor University. Michigan Academician, 45, 1-239.
- Desmet, P. M., & Pohlmeier, A. E. (2013). Positive design: An introduction to design for subjective well-being. International journal of design, 7(3).
- Fadul, J. A. (2011). Insights from emergent education systems in selected countries. Lulu. com.
- Gauthier, F. (2016). Religion in the neoliberal age: Political economy and modes of governance. Routledge.
- Irwin, L. G., Siddiqi, A., & Hertzman, G. (2007). Early child development: a powerful equalizer. Vancouver, BC: Human Early Learning Partnership (HELP).
- Martusewicz, R. A., Edmundson, J., & Lupinacci, J. (2014). Ecojustice education: Toward diverse, democratic, and sustainable communities. Routledge.
- Noguera, P. A., & Wing, J. Y. (Eds.). (2008). unfinished business: Closing the racial

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achievement gap in our schools. John Wiley & Sons.

Rochadiat, A. M., Tong, S. T., & Novak, J. M. (2018). Online dating and courtship among Muslim American women: Negotiating technology, religious identity, and culture. *new media & society*, 20(4), 1618-1639.

Ziccardi, G. (2012). *Resistance, liberation technology and human rights in the digital age* (Vol. 7). Springer Science & Business Media.

Zhou, Q., Huang, Q., & Tian, H. (2013). Developing students' critical thinking skills by task-based learning in chemistry experiment teaching. *Creative Education*, 4(12), 40.

Q. 4 Explain guidelines for writing a research report.

1. Know your purpose

This is the major aim: the reason you're writing the report in the first place. Because it determines the kind of report you write, it's a critical (and often neglected) first step.

Give it a think. Are you writing a factual, instructional or leading report? Remember:

- Factual reports aim to inform.
- Instructional reports aim to explain.
- Leading reports aim to persuade.

Once your major aim has been defined this way, your subsidiary aims will fall into place - you inform in order to explain, and inform and explain in order to persuade. This starting point gives you vital focus, and drives absolutely everything else.

2. Know your readers

Before you start writing your report, consider its audience. Why? Because you can't hit the nail on the head if you can't see the bleedin' nail. In short, to be successful, a report must ensure that its target readers can:

- read it without delay;
- understand everything in it without much effort;
- accept its facts, findings, conclusions and recommendations; and
- decide to take the action recommended.

Achieving this demands more than presenting the facts accurately. It also means that you must communicate acceptably and intelligibly to the reader. But who is he/she?

We can get a clearer picture of our reader by asking three questions:

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- What does the reader know?
- What are the reader's attitudes?
- What does the reader want?

Note: Sometimes it can be difficult to answer these questions, especially when writing for a varied readership. If so, aim for the most important or primary reader.

3. Know your objective

By matching the purpose to the reader, you are ready to set your objective. In other words, what do you want the reader to think and do after reading your report? (People are not brainiacs - often, you have to make it explicit. 'Do this...!')

Here's an example of an objective:

To persuade my MD to authorise a proposed system of flexible working hours

The words "persuade" and "authorize" are the biggies here. They show that you must produce a logical and consistent case: one that will spur your MD to act. Also, once you've set the objective, you can anticipate the likely problems in meeting them - such as the fact that your MD likes to see all staff standing briskly to attention at 7am.

4. Choose an approach

I recommend a top-down approach to writing a report. This starts with the thesis statement (pretentiously also called the "terms of reference"), follows with the information-gathering and continues into three stages of ongoing refinement.

- **Thesis** - the thesis of a report is a guiding statement used to define the scope of the research or investigation. This helps you to communicate your information clearly and to be selective when collecting it.
- **Info-gathering** - there are a number of questions to ask at this stage:
 - What information do I need?

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- How much do I need?
- Where will I find it?
- How will I collect it?
- **Refinement** - there are three stages in the refinement process; namely:
 - Write the section-level outline.
 - Write the subsection-level outline.
 - Write the paragraph-level outline.

Tip: The paragraph-level outline is like a presentation with bulleted points. It incorporates the flow of ideas. Once you have the paragraph-level flow of ideas, you can convert it into a full report by writing out the flow of ideas in full sentences. Like I said, hardly rocket science. But sometimes you just need someone to show you...

5. Decide on structure

Here are 11 basic elements of a standard report. I'm not a masochist, so this structure does not need to be rigidly adhered to. Instead, bring your own circumstances, needs and creativity to the mix, and use whatever's appropriate.

1. Title page
2. Index (or Contents)
3. Thesis (or Terms of Reference or Abstract)
4. Introduction (or Executive Summary)
5. Background
6. Procedure
7. Implications (or Issues)
8. Solutions (or Recommendations)
9. Conclusion
10. Appendices
11. Bibliography (or References)

6. Use the right style

Use hard facts and figures, evidence and justification. Use efficient language - big reports with too many words are awful. The best reports are simple and quick to read because the writer has interpreted the data and developed viable recommendations.

Here are some tips:

1. Write as you speak.
2. Avoid empty words.
3. Use descending order of importance.
4. Use the active voice.
5. Keep sentences short.
6. Don't try to impress; write to express.
7. Get facts 100% right.
8. Be unbiased and open.

7. Consider layout

- Fonts

Remember that reports are conservative and often formal documents, so your font choices should not be cutesy, clever or sexy. For the body of the document, choose a serif font such as Times Roman or Cambria with a point size of 11 or 12. You can use a sans serif font such as Arial or Calibri for bolded headings to complement the body text.

- Visuals

Spend time thinking about the pictures. Wherever necessary, explain all aspects of a visual and don't leave the reader wondering about the connection between the figure and the text. Write good captions, and choose the type of visual with careful consideration. (Bar graphs, pie charts and tables do different things, for example.)

8. Leave time to refine

No report is perfect, and definitely not when it's still Draft 1. Unfortunately, well-written reports are those that have gone through the mill a couple of times, either with your gimlet eye or under the skeptical gaze of someone else. Leave as much time as you can afford to check, check and double-check, and then ask yourself:

- Overall, does the report fulfill its purpose?
- Does it do what I was asked to do?
- Does it do what I said I'd do in my introduction?
- And bottom line: Am I pleased with it?

Q. 5 Discuss observation as a research tool covering the following concepts; its construction, different forms and process to conduct an observation.

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The term **observational research** is used to refer to several different types of non-experimental studies in which behavior is systematically observed and recorded. The goal of observational research is to describe a variable or set of variables. More generally, the goal is to obtain a snapshot of specific characteristics of an individual, group, or setting. As described previously, observational research is non-experimental because nothing is manipulated or controlled, and as such we cannot arrive at causal conclusions using this approach. The data that are collected in observational research studies are often qualitative in nature but they may also be quantitative or both (mixed-methods). There are several different types of observational research designs that will be described below.

NATURALISTIC OBSERVATION

Naturalistic observation is an observational method that involves observing people’s behavior in the environment in which it typically occurs. Thus naturalistic observation is a type of field research (as opposed to a type of laboratory research). Jane Goodall’s famous research on chimpanzees is a classic example of naturalistic observation. Dr. Goodall spent three decades observing chimpanzees in their natural environment in East Africa. She examined such things as chimpanzee’s social structure, mating patterns, gender roles, family structure, and care of offspring by observing them in the wild. However, naturalistic observation could more simply involve observing shoppers in a grocery store, children on a school playground, or psychiatric inpatients in their wards. Researchers engaged in naturalistic observation usually make their observations as unobtrusively as possible so that participants are not aware that they are being studied. Such an approach is called **disguised naturalistic observation**. Ethically, this method is considered to be acceptable if the participants remain anonymous and the behavior occurs in a public setting where people would not normally have an expectation of privacy. Grocery shoppers putting items into their shopping carts, for example, are engaged in public behavior that is easily observable by store employees and other shoppers. For this reason, most researchers would consider it ethically acceptable to observe them for a study. On the other hand, one of the arguments against the ethicality of the naturalistic observation of “bathroom behavior” discussed earlier in the book is that people have a reasonable expectation of privacy even in a public restroom and that this expectation was violated.

In cases where it is not ethical or practical to conduct disguised naturalistic observation, researchers can conduct **undisguised naturalistic observation** where the participants are made aware of the researcher presence and monitoring of their behavior. However, one concern with undisguised naturalistic observation is reactivity. **Reactivity** refers to when a measure changes participants’ behavior. In the case of undisguised naturalistic observation, the concern with reactivity is that when people know they are being observed and studied, they may act differently than they normally would. For instance, you may act much differently in a bar if you know that someone is observing you and recording your behaviors and this would invalidate the study. So disguised observation is less reactive and therefore can have higher validity because people are not aware that their behaviors are being observed and recorded. However, we now know that people often become used to being observed and with time they begin to behave naturally in the researcher’s presence. In other words, over

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time people habituate to being observed. Think about reality shows like Big Brother or Survivor where people are constantly being observed and recorded. While they may be on their best behavior at first, in a fairly short amount of time they are, flirting, having sex, wearing next to nothing, screaming at each other, and at times acting like complete fools in front of the entire nation.

PARTICIPANT OBSERVATION

Another approach to data collection in observational research is participant observation. In **participant observation**, researchers become active participants in the group or situation they are studying. Participant observation is very similar to naturalistic observation in that it involves observing people’s behavior in the environment in which it typically occurs. As with naturalistic observation, the data that is collected can include interviews (usually unstructured), notes based on their observations and interactions, documents, photographs, and other artifacts. The only difference between naturalistic observation and participant observation is that researchers engaged in participant observation become active members of the group or situations they are studying. The basic rationale for participant observation is that there may be important information that is only accessible to, or can be interpreted only by, someone who is an active participant in the group or situation. Like naturalistic observation, participant observation can be either disguised or undisguised. In **disguised participant observation**, the researchers pretend to be members of the social group they are observing and conceal their true identity as researchers. In contrast with **undisguised participant observation**, the researchers become a part of the group they are studying and they disclose their true identity as researchers to the group under investigation. Once again there are important ethical issues to consider with disguised participant observation. First no informed consent can be obtained and second passive deception is being used. The researcher is passively deceiving the participants by intentionally withholding information about their motivations for being a part of the social group they are studying. But sometimes disguised participation is the only way to access a protective group (like a cult). Further, disguised participant observation is less prone to reactivity than undisguised participant observation.

Rosenhan’s study (1973)^[1] of the experience of people in a psychiatric ward would be considered disguised participant observation because Rosenhan and his pseudopatients were admitted into psychiatric hospitals on the pretense of being patients so that they could observe the way that psychiatric patients are treated by staff. The staff and other patients were unaware of their true identities as researchers.

Another example of participant observation comes from a study by sociologist Amy Wilkins (published in *Social Psychology Quarterly*) on a university-based religious organization that emphasized how happy its members were (Wilkins, 2008)^[2]. Wilkins spent 12 months attending and participating in the group’s meetings and social events, and she interviewed several group members. In her study, Wilkins identified several ways in which the group “enforced” happiness—for example, by continually talking about happiness, discouraging the expression of negative emotions, and using happiness as a way to distinguish themselves from other groups.

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One of the primary benefits of participant observation is that the researcher is in a much better position to understand the viewpoint and experiences of the people they are studying when they are apart of the social group. The primary limitation with this approach is that the mere presence of the observer could affect the behavior of the people being observed. While this is also a concern with naturalistic observation when researchers observe active members of the social group they are studying, additional concerns arise that they may change the social dynamics and/or influence the behavior of the people they are studying. Similarly, if the researcher acts as a participant observer there can be concerns with biases resulting from developing relationships with the participants. Concretely, the researcher may become less objective resulting in more experimenter bias.

STRUCTURED OBSERVATION

Another observational method is structured observation. Here the investigator makes careful observations of one or more specific behaviors in a particular setting that is more structured than the settings used in naturalistic and participant observation. Often the setting in which the observations are made is not the natural setting, rather the researcher may observe people in the laboratory environment. Alternatively, the researcher may observe people in a natural setting (like a classroom setting) that they have structured some way, for instance by introducing some specific task participants are to engage in or by introducing a specific social situation or manipulation. Structured observation is very similar to naturalistic observation and participant observation in that in all cases researchers are observing naturally occurring behavior, however, the emphasis in structured observation is on gathering quantitative rather than qualitative data. Researchers using this approach are interested in a limited set of behaviors. This allows them to quantify the behaviors they are observing. In other words, structured observation is less global than naturalistic and participant observation because the researcher engaged in structured observations is interested in a small number of specific behaviors. Therefore, rather than recording everything that happens, the researcher only focuses on very specific behaviors of interest.

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Researchers Robert Levine and Ara Norenzayan used structured observation to study differences in the “pace of life” across countries (Levine & Norenzayan, 1999)^[3]. One of their measures involved observing pedestrians in a large city to see how long it took them to walk 60 feet. They found that people in some countries walked reliably faster than people in other countries. For example, people in Canada and Sweden covered 60 feet in just under 13 seconds on average, while people in Brazil and Romania took close to 17 seconds. When structured

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observation takes place in the complex and even chaotic “real world,” the questions of when, where, and under what conditions the observations will be made, and who exactly will be observed are important to consider.

Levine and Norenzayan described their sampling process as follows:

“Male and female walking speed over a distance of 60 feet was measured in at least two locations in main downtown areas in each city. Measurements were taken during main business hours on clear summer days. All locations were flat, unobstructed, had broad sidewalks, and were sufficiently uncrowded to allow pedestrians to move at potentially maximum speeds. To control for the effects of socializing, only pedestrians walking alone were used. Children, individuals with obvious physical handicaps, and window-shoppers were not timed. Thirty-five men and 35 women were timed in most cities.” (p. 186). Precise specification of the sampling process in this way makes data collection manageable for the observers, and it also provides some control over important extraneous variables. For example, by making their observations on clear summer days in all countries, Levine and Norenzayan controlled for effects of the weather on people’s walking speeds. In Levine and Norenzayan’s study, measurement was relatively straightforward. They simply measured out a 60-foot distance along a city sidewalk and then used a stopwatch to time participants as they walked over that distance.

As another example, researchers Robert Kraut and Robert Johnston wanted to study bowlers’ reactions to their shots, both when they were facing the pins and then when they turned toward their companions (Kraut & Johnston, 1979)^[4]. But what “reactions” should they observe? Based on previous research and their own pilot testing, Kraut and Johnston created a list of reactions that included “closed smile,” “open smile,” “laugh,” “neutral face,” “look down,” “look away,” and “face cover” (covering one’s face with one’s hands). The observers committed this list to memory and then practiced by coding the reactions of bowlers who had been videotaped. During the actual study, the observers spoke into an audio recorder, describing the reactions they observed. Among the most interesting results of this study was that bowlers rarely smiled while they still faced the pins. They were much more likely to smile after they turned toward their companions, suggesting that smiling is not purely an expression of happiness but also a form of social communication.

When the observations require a judgment on the part of the observers—as in Kraut and Johnston’s study—this process is often described as **coding**. Coding generally requires clearly defining a set of target behaviors. The observers then categorize participants individually in terms of which behavior they have engaged in and the number of times they engaged in each behavior. The observers might even record the duration of each behavior. The target behaviors must be defined in such a way that different observers code them in the same way. This difficulty with coding is the issue of interrater reliability, as mentioned in Chapter 4. Researchers are expected to demonstrate the interrater reliability of their coding procedure by having multiple raters code the same behaviors independently and then showing that the different observers are in close agreement. Kraut and Johnston, for example, video recorded a subset of their participants’ reactions and had two observers independently code them. The two observers showed that they agreed on the reactions that were exhibited 97% of the time, indicating good interrater reliability.

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One of the primary benefits of structured observation is that it is far more efficient than naturalistic and participant observation. Since the researchers are focused on specific behaviors this reduces time and expense. Also, often times the environment is structured to encourage the behaviors of interested which again means that researchers do not have to invest as much time in waiting for the behaviors of interest to naturally occur. Finally, researchers using this approach can clearly exert greater control over the environment. However, when researchers exert more control over the environment it may make the environment less natural which decreases external validity. It is less clear for instance whether structured observations made in a laboratory environment will generalize to a real world environment. Furthermore, since researchers engaged in structured observation are often not disguised there may be more concerns with reactivity.

CASE STUDIES

A **case study** is an in-depth examination of an individual. Sometimes case studies are also completed on social units (e.g., a cult) and events (e.g., a natural disaster). Most commonly in psychology, however, case studies provide a detailed description and analysis of an individual. Often the individual has a rare or unusual condition or disorder or has damage to a specific region of the brain.

Like many observational research methods, case studies tend to be more qualitative in nature. Case study methods involve an in-depth, and often a longitudinal examination of an individual. Depending on the focus of the case study, individuals may or may not be observed in their natural setting. If the natural setting is not what is of interest, then the individual may be brought into a therapist’s office or a researcher’s lab for study. Also, the bulk of the case study report will focus on in-depth descriptions of the person rather than on statistical analyses. With that said some quantitative data may also be included in the write-up of a case study. For instance, an individuals’ depression score may be compared to normative scores or their score before and after treatment may be compared. As with other qualitative methods, a variety of different methods and tools can be used to collect information on the case. For instance, interviews, naturalistic observation, structured observation, psychological testing (e.g., IQ test), and/or physiological measurements (e.g., brain scans) may be used to collect information on the individual.

HM is one of the most notorious case studies in psychology. HM suffered from intractable and very severe epilepsy. A surgeon localized HM’s epilepsy to his medial temporal lobe and in 1953 he removed large sections of his hippocampus in an attempt to stop the seizures. The treatment was a success, in that it resolved his epilepsy and his IQ and personality were unaffected. However, the doctors soon realized that HM exhibited a strange form of amnesia, called anterograde amnesia. HM was able to carry out a conversation and he could remember short strings of letters, digits, and words. Basically, his short term memory was preserved. However, HM could not commit new events to memory. He lost the ability to transfer information from his short-term memory to his long term memory, something memory researchers call consolidation. So while he could carry on a conversation with someone, he would completely forget the conversation after it ended. This was an extremely important case study for memory researchers because it suggested that there’s a dissociation between

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short-term memory and long-term memory, it suggested that these were two different abilities sub-served by different areas of the brain. It also suggested that the temporal lobes are particularly important for consolidating new information (i.e., for transferring information from short-term memory to long-term memory). Observations are an important research method for managers, businesses, and researchers alike to determine how people interact and behave in different environments. Observations can help researchers better determine what people do given different scenarios and environmental factors.

1. Identify Objective

Determine what you want to observe and why. Are looking to see how students respond to a new environment? How customers interact with employees? How bosses interact with subordinates? When conducting observations, you are trying to learn habits, patterns, behaviors, reactions, and general information about people in a particular environment to better understand what they do and, hopefully eventually, why they do it (though observations alone often won't tell you the “why”).

2. Establish Recording Method

To make observations most effective, it's important that you minimize or eliminate any disruptive or unfamiliar devices into the environment you wish to observe. For example, it is often least effective to videorecord observations in situations where the people being observed know they are being filmed (but it's usually unethical to film without telling them. Note-taking is the most common method, though in some public spaces you can take photographs, audio recordings, and other methods.

3. Develop Questions and Techniques

Determine whether you are conducting an informal or a formal observation (see explanations to the far right.) Knowing your objective, determine if there are specific questions you have or if you are going in completely open-minded. What you hope to learn will help you know what specifically to look for. Be prepared when entering an observation space by having a sound understanding of the type of information you are trying learn.

4. Observe and Take Notes

Visit the space you are hoping to get information from. Be as unobtrusive as possible, taking notes, photographs, audio, and film, only where it is allowed, you have permission, and it makes sense for the research without disrupting the environment. If you are doing formal observations, will you need to code certain behaviors, actions, words, visuals, and other observed data.

5. Analyze Behaviors and Inferences

Separate the difference between what you observed (which are factual behaviors) and why what you observed happened. Typically, to make some sense of your observed data, you will need to interview people in the environment you are observing, either during the observation itself, or afterwards. Make connections between interactions, responses, behaviors, and other phenomena.